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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/621,643 | 07/17/2003 | James A. Blackstone | PRG 0001 PA | 1024 |
| 7590 | 06/07/2005 | | EXAMINER | |
| Killworth, Gottman, Hagan & Schaeff, L.L.P. Suite 500 One Dayton Centre Dayton, OH 45402-2023 | | | PIERCE, WILLIAM M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3711 | |

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|----------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/621,643 | BLACKSTONE, JAMES A. | |
| | Examiner | Art Unit | |
| | William M Pierce | 3711 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10/16/03

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-32 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



WILLIAM M. PIERCE
 PRIMARY EXAMINER

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 1.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-32 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. Many variables affect the actual target point of the ball as from the release point. Factors such as the weight and cover stock material of the ball, type of lane surface, oiling conditions and style of bowler (i.e. a cranker, spinner or a stroker). A spinner (assuming that applicant is familiar with this style, references can be provided if not) would not be assisted by the claimed invention. Further oiling conditions of the lane vary greatly from lane to lane and a bowler would need to shift more or less to achieve a desired target point for a ball depending upon whether the oil is heavy or light and upon its migration on the lane. Since applicant's invention does not take into account many variables that would control the exact placement of the bowling ball, it is clear that the desired results cannot be repeatably obtained and the invention is considered inoperable. Lastly, there is no evidence of record that shows applicant's invention produces the claimed results or "improving scores" or solves any particular problem. Examiner's position that a quantitative system for bowling will not work consistently is shared by the prior art. Note "Strike and Spare Systems-Targetting Systems"

Claims 1-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-17 pertain to indicia or a kit of indicia which as been held to be non-statutory by stating that a mere arrangement of printed matter, though seemingly a "manufacture," is rejected as not being within the statutory classes. See *In re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969); *Ex parte Gwinn*, 112 USPQ 439 (Bd. App. 1955); and *In re Jones*, 373 F.2d 1007, 153 USPQ 77 (CCPA 1967). Claims 17-32 are drawn to abstract ideas rather than definite physical steps that produce consistent predictable results. A claim that requires one or more acts to be performed defines a process. However, not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed process must either: (A) result in a physical transformation for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan (discussed in i) below), or (B) be limited to a practical application within the technological arts (discussed in ii) below). See *Diamond v. Diehr*, 450 U.S. at 183-84, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1877)) ("A [statutory] process is a mode of treatment of certain materials to produce a

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given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.... The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence."). See also Alappat, 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond v. Diehr*, 450 U.S. at 192, 209 USPQ at 10). See also *id.* at 1569, 31 USPQ2d at 1578-79 (Newman, J., concurring) ("unpatentability of the principle does not defeat patentability of its practical applications") (citing *O'Reilly v. Morse*, 56 U.S. (15 How.) at 114-19).

In the instant claims, there is no physical transformation and more importantly no "given results". In other words the treatment of the materials (i.e. the bowling lane) is not reduced to a different state or thing nor are there any "given results" achieved by the method.

This requirement for a "transformation" is supported by the non-statutory nature of a manipulation of abstract ideas when the interpretation of the claims is that they do not expressly or implicitly require performance of any of the steps by a machine (or physical apparatus). This requirement is one that the claims recite a "practical application, i.e., 'a useful, concrete and tangible result.'" *State St. Bank & Trust Co. v. Signature Fin. Group Inc.*, 149 F.3d 1368, 1371, 47 USPQ 2d 1596, 1600-01 (Fed. Cir. 1998).

In the instant case, the claims do not require the manipulation of an apparatus, do not result in a concrete and tangible result and fail to transform the subject matter to a something different than existed before the steps were performed.

Further, the subject matter courts have found to be outside the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena. These three exclusions recognize that subject matter that is not a practical application or use of an idea, a law of nature or a natural phenomenon is not patentable. See, e.g., *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874) ("idea of itself is not patentable, but a new device by which it may be made practically useful is"); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86, 94, 40 USPQ 199, 202 (1939) ("While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."); In the instant case applicant as merely quantified in table form what is currently being done in bowling of using

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markings on the lanes to aim and make adjustments to achieve the desired placement of the bowling ball. In line with this, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759 ("steps of locating' a medial axis, and 'creating' a bubble hierarchy . . . describe nothing more than the manipulation of basic mathematical constructs, the paradigmatic abstract idea' "). Here applicant's claimed invention does nothing more than manipulate basic mathematical concepts already used in bowling with no new results or problems solved. Courts have expressed a concern over "preemption" of ideas, laws of nature or natural phenomena. The concern over preemption was expressed as early as 1852. See Le Roy v. Tatham, 55 U.S. 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-32 are rejected under 35 U.S.C. 102(b) as anticipated by Brunswick Anvilane or, in the alternative, under 35 U.S.C. 103(a) as obvious over Complete Bowling index "Targeting Aids: The dots and arrows" (CB) in view of AMF and PRO TIPS: Cheryl Daniels and further in view of BowlingFans.com (Kegler's) and Speed Control.

As to claim 1, CB shows a first indicia in the third set of dots "approximately 3 inches away" from the foul line and a third indicia in the arrows. These markings are old and well known as shown by PTO TIPS: Cheryl Daniels on pg. 1, ln. 3 where she states, "now every bowling center has a configuration of dots and arrows to help you aim more precisely instead of aiming directly at the pins" Breakpoint targeting is an alternative method for the more advanced bowler as taught by Kegler's which shows Brunswick Anvilane ™ that has used 4 markers. Pictures of this same Brunswick system are shown by Speed Control. While claim 1 reads on Brunswick Anvilane, the references of record are not clear whether or not conventional markings (dots and arrows) are also available. As such, the alternative is that to have included the breakpoint markings of Kegler's and Speed Control would have been obvious so that a bowler has a marked reference point on the bowling lane to note and target the breaking point of the ball when aiming. Further it is not clear whether the scope of the claim pertains to the indicia on the bowling lane or numerical indicia that can be written down in a table. As such to have quantified the indicia used currently in bowling

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alleys in the form of a table would have been obvious in order to make it easier to calculate the desired ball position from the indicia used on the lane.

As to claims 2-15, the use of the markings on a bowling alley are used to analytically determine how one changes variables used in the delivery of a bowling ball down the alley. CB shows where this system allows one to "fine tune" (sixth to last line, pg. 2) where the ball is placed. To have quantified this process with a table of numbers would have been obvious in order to make it more convenient for a person to calculate the changes that need to be made in his delivery in order to obtain the desired placement of the ball. For the reasons set forth in the rejection under 101, to "describe nothing more than the manipulation of basic mathematical constructs" in bowling would have been obvious in order to make it easier for a bowler to calculate the adjustments needed for a desired placement of a bowling ball.

As to claim 16-32, the use of worksheets and tabulated information to record and organize an analytical problem is well known. To have used a worksheet to record a variables encountered by a bowler would have been obvious in order to make it more convenient to the alternative of having to remember. Note that motivation can come from 1) the teachings of the prior art, 2) the knowledge of persons of ordinary skill in the art and/or 3) the nature of the problem solved. See *In re Rouffet*, 149 F.3d 1350, 47 USPQ 2nd 1453 (Fed. Cir. 1998). Lastly, it has been held that the addition of instructions for how to use a device cannot impart patentability. See *In re Ngai* (5/13/04)(*Michel, Garjarsa, Linn*)(per curiam)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kennedy shows bowling lane markers***

Any inquiry concerning this communication and its merits should be directed to William Pierce at E-mail address bill.pierce@USPTO.gov or at telephone number (571) 272-4414.

For official fax communications to be officially entered in the application the fax number is (703) 872-9306.

For informal fax communications the fax number is (703) 308-7769.

Any inquiry of a general nature or relating to the status of this application or proceeding can also be directed to the receptionist whose telephone number is (703) 308-1148.

Any inquiry concerning the drawings should be directed to the Drafting Division whose telephone number is (703) 305-8335.



WILLIAM M. PIERCE
PRIMARY EXAMINER